

WHAT IS CLAIMED IS:

1. An alternator for use in an automotive vehicle, the alternator comprising:

a housing formed in a substantially cylindrical shape having an axial end wall;

a stator fixedly disposed in the housing;

a rotor rotatably supported inside the stator, the rotor including a cooling fan fixed to its axial end surface, wherein:

a plurality of spokes are formed on the axial end wall of the housing;

air inlet ports facing the cooling fan are formed at both sides of the spokes, so that cooling air is introduced into the housing through the inlet ports according to rotation of the cooling fan fixed to the rotor; and

the spokes are tilted in a direction opposite to a rotational direction of the rotor with respect to a radial line extending from a rotational center of the rotor.

2. The alternator as in claim 1, wherein:

the spokes are tilted by a tilt angle in a range from 10° to 45°.

3. The alternator as in claim 1, wherein:

only one side of the spokes which is positioned downstream of the rotational direction of the rotor is tilted.

4. The alternator as in claim 2, wherein:
the tilt angle is set not to exceed 25°.

5. The alternator as in claim 1, wherein:
only some of the plurality of spokes are tilted
while other spokes are not tilted.